

The Amorium Project: The 1996 Excavation Season

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INTRODUCTION

The ninth season of excavations at Amorium in central Turkey took place over a seven-week period in July and August 1996.¹ The analysis and assessment of the results are still at an early stage, but it is possible to give a preliminary account and interpretation of what was another very successful and eventful campaign.²

*Compiled with the assistance of other team members, notably Eric A. Ivison, Yalçın Mergen, Mücahide Koçak, and Paola Pugsley.

¹For a complete bibliography to 1995, see C. S. Lightfoot and E. A. Ivison, "The Amorium Project: The 1995 Excavation Season," *DOP* 51 (1997), 291 n. 1. During 1996–97 the following reports were also published: C. S. Lightfoot, E. A. Ivison, et al., "Amorium Excavations 1995, the Eighth Preliminary Report," *AnatSt* 46 (1996), 91–110; C. S. Lightfoot, "1995 yılı Amorium kazısı," in *XVIII. Kazı Sonuçları Toplantısı, Ankara, 27–31 Mayıs 1996* (Ankara, 1997), 431–47; M.-H. Gates, "Archaeology in Turkey," *AJA* 101.2 (1997), 298–300 and figs. 40–41; C. S. Lightfoot, "Excavations at Amorium in 1996," *Bulletin of British Byzantine Studies* 23 (1997), 39–49; C. Lightfoot, "Amorium 1996," in *Anatolian Archaeology: Reports on Research Conducted in Turkey*, ed. G. Coulthard and S. Hill, II (1996 [1997]), 8–9; and T. Drew-Bear and T. Lochmann, "Grabreliefs aus Amorion, Orkistos und der antiken Siedlung von Bağlica Zeugen verlorengegangener Grabbauten," *Ege Üniversitesi Arkeoloji Dergisi* 4 (1996), 109–34.

²The Amorium excavations are conducted by an international group of archaeologists and students, many of whom have now been connected with the excavations for several years. In 1996 the team comprised Chris Lightfoot (director), Eric Ivison (assistant director), Yalçın Mergen (field archaeologist), Karen Barker (conservator), John Giorgi (archaeobotanist), Elizabeth Hendrix (stone conservator), Paola Pugsley (field archaeologist), and Julie Roberts (human anthropologist). In addition, archaeology graduates and students from universities in Turkey, Britain, Germany, and the United States took part in the excavations; they were Zeliha Demirel, Mücahide Koçak, Defne Özbayer, Ayşe Taşkın, Feriye Ülker, Hasan Yilmazyavaşar (all from the University of Anatolia at Eski-

The main purpose of the work at Amorium has been to trace through the archaeological record the developments and changes that the city underwent during the half millennium or so from the late antique to the middle Byzantine period. A second, subsidiary aim has been to investigate the nature of the transition from Byzantine to Turkish occupation, tracing the decline of Amorium from a large urban settlement to a small rural community. In addition, other work is being carried out in order to

şehir), Betül Şahin (Ankara University), Beate Böhlendorf (Heidelberg University), Olga Karagiorgou (Oxford University), Simon Young (Durham University), and Christine Zitrides (Florida State University).

The project team is extremely grateful for the continued help and support provided by the Directorate of Monuments and Museums at the Ministry of Culture. We also benefited greatly from the warm welcome and kind assistance extended to us during the excavation season by Sayın İbrahim Avcı, district governor of Emirdağ, Sayın İsmet Güler, mayor of Emirdağ, Sayın Ahmet Tabur, director of cultural affairs, Afyon Province, and Sayın Ahmet İlaşlı and all the staff of the Archaeological Museum in Afyon. Numerous other individuals also offered us valuable help, advice, and encouragement, notably Cyril Mango, Ebru Parman, Hüseyin Tanrikulu (mayor of Piri-beyli), Marlia Mango, Richard Ashton, David Barchard, John Casey, Mark Whittow, and Pamela Armstrong.

The government representative was Hayriye Avcı from the Kocaeli Museum and later Mustafa Demirel from the Archaeological Museum in Antalya. Visitors to Amorium during the summer of 1996 included Levent Zoroğlu (Seljuk University, Konya), Melih Arslan (Anatolian Civilizations Museum, Ankara), Peter Kuniholm (Cornell University), Kenneth Harl (Tulane University, New Orleans), Timothy Mitford (British Institute of Archaeology at Ankara), Trevor Proudfoot (Aphrodisias excavations), Keith Devries (Gordion excavations), Martin Styan (from Bratislava, Slovakia), Osman Kızılkılıç, and John Duncan.

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compare and contrast the use of both the area within the city and the territory that it controlled. This may, for example, help to shed light on the changes in land use and the way in which agriculture in central Anatolia was gradually replaced by pastoralism in the medieval period. In addition, the Upper City is a large manmade mound or tell (*höyük*) and holds out the possibility of studying the earlier history of the site, but since the Roman, Iron Age, and Hittite periods are being studied elsewhere in the region, notably at Pessinus, Aizanoi, Gordion, and Dorylaeum, the focus of the work at Amorium will remain with the late antique, Byzantine, and Turkish levels. In this way we hope to optimize the contribution that the Amorium Project can make to the archaeology of central Anatolia.

The strategy has been one of excavating discrete areas of the site, combined with intensive surface survey, in order to gain a better understanding of the history and archaeology of Amorium. So, for example, before excavations started it was commonly believed that the city had been abandoned by the Byzantines in the latter part of the eleventh century and that the site had remained completely unoccupied until 1892, when the modern village of Hisarköy was established. Work, however, has shown that there was a considerable Turkish presence at Amorium at least from the thirteenth to the eighteenth century. Likewise, the strategy of opening up trenches both on the Upper City mound and in the Lower City has allowed us to compare directly these two areas of the site and to understand better the changing relationship that existed between them at various periods in the city's history.

In 1996 excavations were conducted in four trenches (Fig. A), one on the Upper City mound in a new area next to the trench where the middle Byzantine kiln was found in 1995, while the other three trenches were in the Lower City. These provided much complementary and contrasting information about the Byzantine and Turkish occupation of Amorium and included for the first time conclusive evidence for permanent settlement of the Upper City in the Ottoman period. Equally exciting was the discovery of a massive stone floor covering the whole of the south aisle of the Lower City church, under which there may be

a lower story or crypt. The other two trenches supplied further abundant evidence for continued occupation of the Lower City in the middle Byzantine period.

At the dig house, much effort was put into recording the human bones, the fresco fragments, the decorated stone and epigraphic fragments, and the coins, while a preliminary survey of the middle Byzantine and late medieval ceramic finds was conducted by Beate Böhlendorf. In addition, archaeobotanical sampling was carried out by John Giorgi (a flotation unit was constructed and put into operation this year), while other samples (carbon, wood, paint, stone, and pottery) have been sent to the United Kingdom and the United States for analysis.

In addition to excavation, research, and publication, there is an awareness of the project's obligation to preserve the site and to conserve the excavated structures so that future generations can enjoy and learn from Amorium. Each year a considerable amount of time, effort, and expenditure is devoted to this work both on site and at the dig house, where every attempt is made to repair and improve the facilities.³ In the long term there is a need to give Amorium a role within the local community, providing educational and recreational opportunities not just for visiting tourists but also for the people of Emirdağ. Ultimately, the fate of Amorium lies in the hands not of the archaeologists but of the inhabitants of Hisarköy and the surrounding area.

THE LOWER CITY CHURCH

The excavation of the Lower City church (Fig. A, no. 1) has been continuing since 1990. Work in 1996 concentrated on three areas inside the excavated structure with the aim of completing the planning of the floor and con-

³So, for example, with the assistance of the Turkish authorities in Emirdağ, further progress was made in removing some of the spoil heaps that have been building up around the Lower City church since excavations began there in 1990. The visit of Trevor Proudfoot, arranged by the British Institute of Archaeology at Ankara with the approval of R. R. R. Smith, enabled a further assessment to be made of the long-term conservation needs of the site. His report, being both constructive in its recommendations and encouraging in its appraisal of the feasibility for conserving the exposed masonry, was a welcome contribution to the season's work.

tinuing the excavation of the main body of the church. The three areas were the central bay of the north aisle, the southern half of the narthex, and the south section/balk in the south aisle.

The 1995 backfill was cleared from the bay and the north side of the nave in order to complete the planning of the floor.⁴ The design of the opus sectile marble pavement in the nave is quite intricate; the floor is divided into strips running along an east-west axis, parallel to the Phase II piers, the Phase I stylobate, and the ambo, whose foundations occupy the center of the nave. The central bay of the north aisle is, by contrast, paved with tiles, but only part is preserved, the gaps being filled with an earth floor. The surface of the tiles and of the earth floor both show signs of burning. A sondage trench was dug through the earth floor in an attempt to discover traces of the Phase I flooring and the original foundations of the building. In the northeast corner of the bay a large breccia slab (T967), uncovered in 1995, was lifted (Fig. 1). This proved to be part of the Phase I furnishings of the church; to date it is the only piece of the late antique ambo that has come to light. As such it constitutes a valuable addition to the collection of carved stones from the church and stands as a comparison piece to the fragments of the middle Byzantine ambo.⁵

Excavation of the southern half of the narthex started from the level reached in 1993. Removal of a layer of dumped earth and rubble revealed remnants of a burned surface on a clay floor. The clay floor was laid on top of the Byzantine tiled floor, which is only partially preserved (Fig. 2). The clay floor is of the same period as other clay floors encountered throughout the building, laid immediately above the damaged or stripped Byzantine pavements. These clay floors were all burned by fire. This first post-Christian phase, which witnessed the stripping of marble slabs from the pavement in the nave and bema, the scraping down of frescoes from the lower walls, and the demolition of the liturgical furniture,

can be dated by a coin found in 1994 in the Seljuk footing piled on the templon immediately after the fire. The coin has been identified and dated to the early thirteenth century, thus providing a *terminus ante quem* for the first Seljuk use of the building.⁶

The massive south balk, created during the excavation of the nave between 1990 and 1993, covered most of the south aisle. Since it constituted the last remaining section within the body of the church that preserved a full stratigraphic record from the topsoil downward, a careful record was made of each layer as it was removed. In the west bay a large pit of modern date had been cut down to within a meter of the pavement and contained ancient, medieval, and modern pottery, together with one copper alloy coin of Leo V (SF3402). The pit was evidently used to rob masonry from the church earlier this century. Despite this activity, the main south wall is well preserved and furnished an unexpected find. In the west bay a large fragment of painted fresco was found still in situ (Fig. 3). The colors of the fresco, predominantly dark blue, green, and red, retained much of their original freshness. The fresco depicts a standing figure clothed in a long garment with a central vertical stripe and broad edges, possibly meant to represent a lining of fur. Only the lower half of the figure survives, but it is likely from its rather unimportant position within the church's scheme of fresco decoration that it portrays a minor saint. Interestingly, the figure constitutes a second, upper layer of painted plaster, indicating that here as elsewhere in the church there were two principal phases of fresco decoration in the middle Byzantine period. It would seem that the fresco had survived largely because it was concealed and protected behind a rubble wall that had been built parallel to the main south wall. Other evidence of the Turkish reoccupation and use of the south aisle was to be found in the series of stone-lined pits or troughs that had been constructed in the corners of each bay between the south wall and the adjacent buttresses (Fig. 4). One of these, excavated in the southeast corner of the east bay, was appar-

⁴Eric Ivison is presently engaged in linking the various sections of the plan, and, once it is complete, we will be better able to see and appreciate the full layout of the pavement in the nave and bema.

⁵C. S. Lightfoot et al., "Amorium Excavations 1993, the Sixth Preliminary Report," *AnatSt* 44 (1994), 121, pl. XXI(a); *AnatSt* 46 (1996), 102-3, pl. XIII(a).

⁶C. S. Lightfoot, E. A. Ivison, et al., "Amorium Excavations 1994, the Seventh Preliminary Report," *AnatSt* 45 (1995), 137, no. 2.

ently used over a considerable length of time, for it was subsequently given a brick lining. All of these troughs have been interpreted as storage bins, possibly used for animal fodder and other agricultural supplies. During the course of excavation they were disassembled in order to allow the excavation of the entire floor of the aisle and to recover reused Byzantine furnishings. These included a badly damaged but still recognizable font (T961), possibly of middle Byzantine date (Fig. 5).

Another unexpected but very interesting discovery was that the middle Byzantine floor of the south aisle was quite different from those in the nave (marble opus sectile) and north aisle (tile). Here the entire length of the aisle was paved with massive stone slabs, some of which had subsequently been prised up from their original positions, probably when the later Turkish occupants of the building were looking for treasure (Fig. 6). It is clear that this floor is not laid on solid foundations, as in the case of the north aisle, but covers an empty space below. This has not been investigated so far, but it would seem to suggest that, as in a number of other churches, the south aisle may have a lower story or crypt. It also means that, despite our best intentions and well-laid plans, the excavation of the Lower City church is far from complete.

THE UPPER CITY, TRENCH UU

At the beginning of the season a new area was marked out for excavation adjacent to the trench where the potter's kiln had been found in 1995 (Fig. A, no. 2).⁷ The intention was to remove the upper layers fairly rapidly and so uncover the middle Byzantine strata containing the workshop area. However, immediately below the topsoil we encountered a two-room dwelling whose roof had collapsed, leaving a mass of partially burned timbers and beams. These were painstakingly excavated, recorded, and sampled. The samples were later sorted and a selection removed for further study at the Carol and Malcolm Wiener Laboratory for Aegean Dendrochronology at Cornell University. Once this layer of debris had been removed, a good floor surface was

revealed (Fig. 7). The finds from this layer included several clay tobacco pipe fragments, the iron mechanism from a flintlock musket, and a silver *para* of the Ottoman sultan Mustafa III (SF3422, dated A.H. 1182/A.D. 1769). The quality of the construction, the liberal use of mortar, and the small finds suggest long-term occupation and a relatively high standard of living.

Such evidence was totally unexpected, since it had previously been thought that there had been no real Ottoman presence at the site, only traces of seasonal occupancy by Turkoman tribesmen.⁸ The late date of this settlement was also a surprise, and it represents an important addition to the history of Amorium. This discovery has prompted a more detailed study of the Ottoman archives in an attempt to ascertain the nature, size, and status of the Turkish community occupying the site, known at least since the time of Suleyman the Magnificent by the name of Hisarcık.⁹ The site, however, was apparently unoccupied when it was identified as Amorium by William Hamilton during his visit in 1836, and it had clearly been deserted for some time before the present village was founded in 1892.¹⁰

Excavation of the substantial Ottoman layer took up most of the season, but below it two other distinct periods of activity could be identified. A number of floor surfaces were found, indicating that occupation of the site stretched back into the Seljuk period, but the late medieval strata had largely been obliterated by the Ottoman dwelling. A layer representing a middle Byzantine industrial dump was also reached during the season but was not investigated. As a result, further investigation of the potter's workshop has had to be postponed until a future season.

⁸C. S. Lightfoot, "Amorium: Byzantine City to Turkish Encampment," *Minerva* 7.4 (1996), esp. 25.

⁹Ottoman archives show that in 1530 the village comprised 14 households and included 43 taxpayers, from whom the sum of 2,056 *akçe* was levied. This information was kindly provided by Sayın Muharrem Bayar, director of the Anatolian High School in Bolvadin.

¹⁰W. J. Hamilton, *Researches in Asia Minor, Pontus and Armenia*, I (London, 1842), 449: "We reached the deserted and dreary site of what was once a populous city; and seldom have I witnessed a more striking scene of solitude and desolation: a few cattle were grazing amongst the ruins, and a rank herbage and numerous wild flowers grew in profusion amidst the fallen buildings."

⁷*AnatSt* 46 (1996), 106.

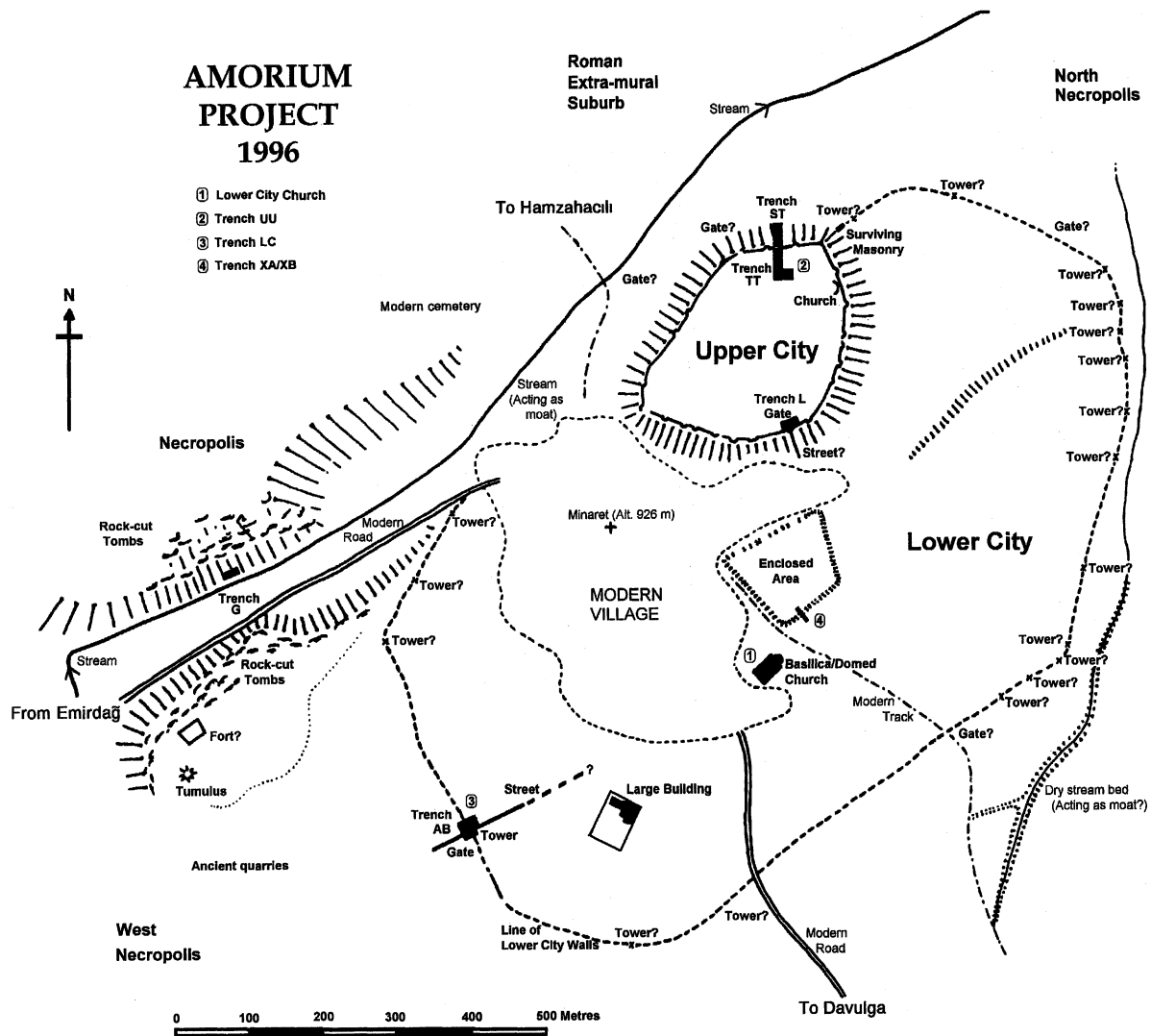


Fig. A Sketch plan of Amorium, 1988–96 (adapted from H. G. Welfare, assisted by H. Dodge and A. Wilkins, in R. M. Harrison, “Amorium 1987: A Preliminary Survey,” *AnatSt* 38 [1988], 178, fig. 2)

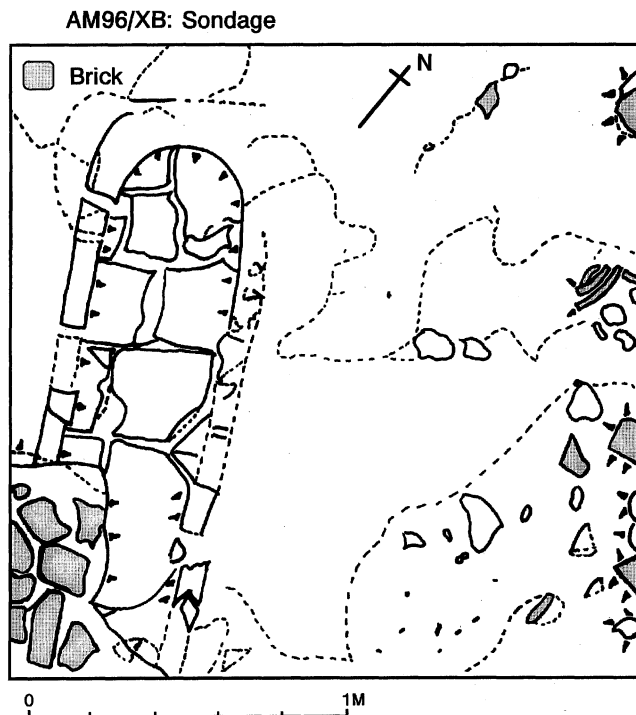


Fig. B Plan of the excavated area inside the enclosure, initial sondage (drawing by Ayşe Taşkın)

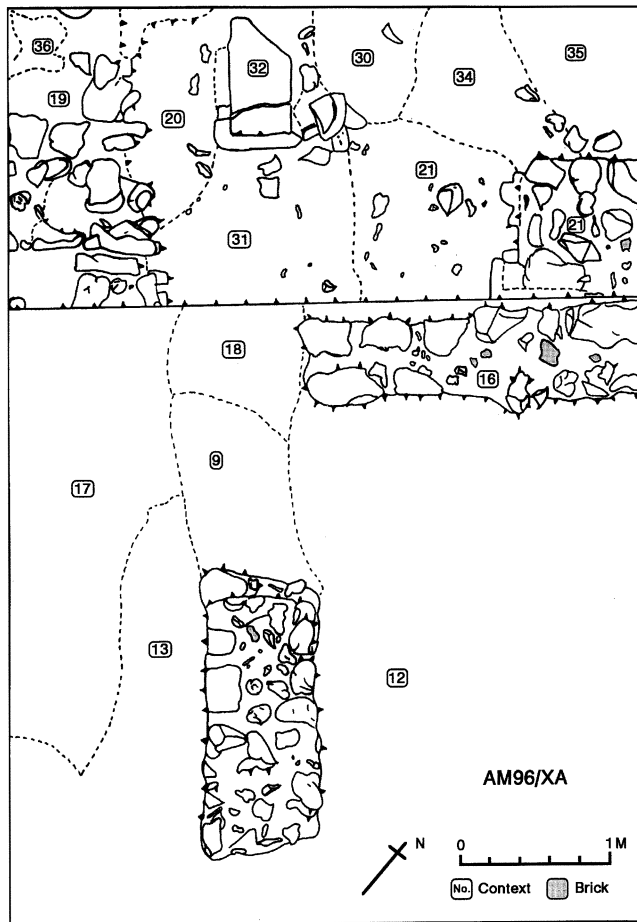


Fig. C Plan of the excavated area outside the enclosure, final state (drawing by Ayşe Taşkın)

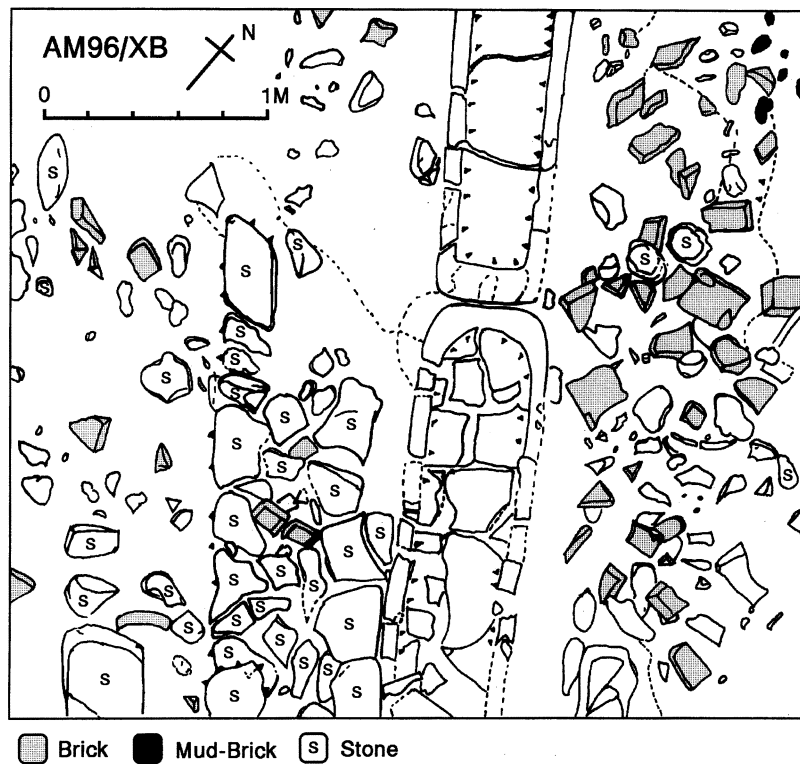


Fig. D Plan of the excavated area inside the enclosure, final state (drawing by Ayşe Taşkın)

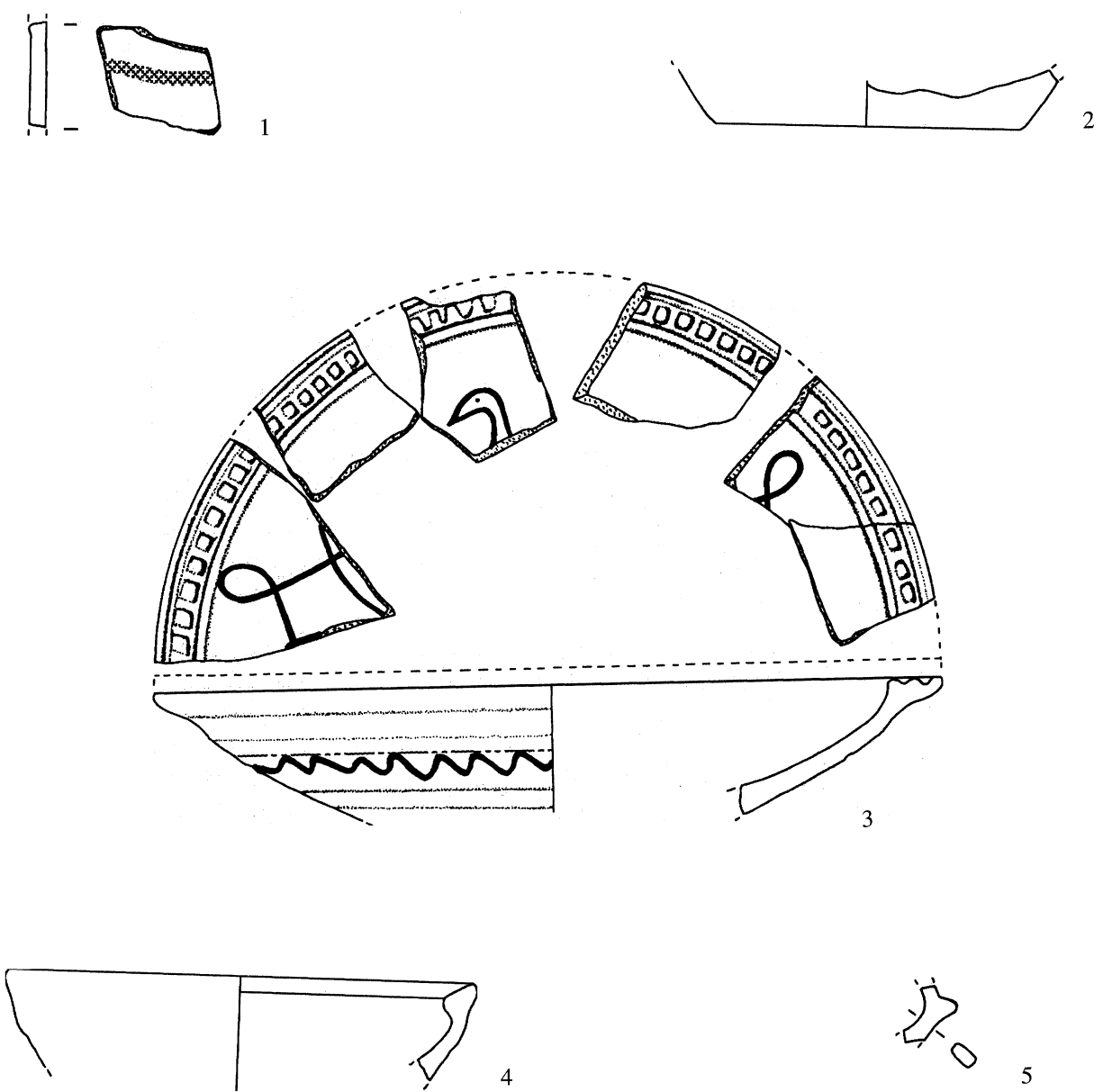
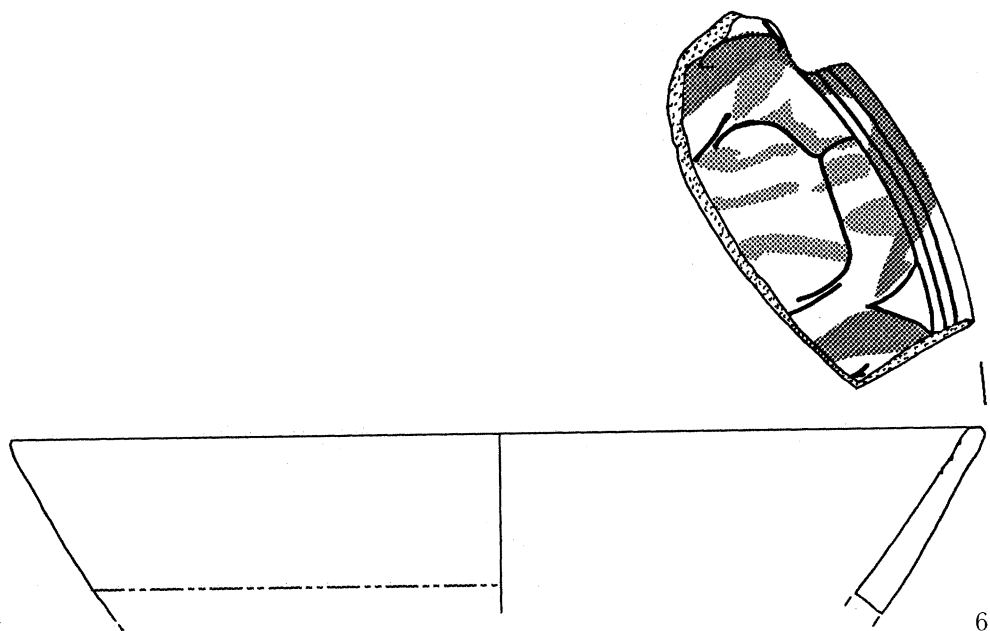
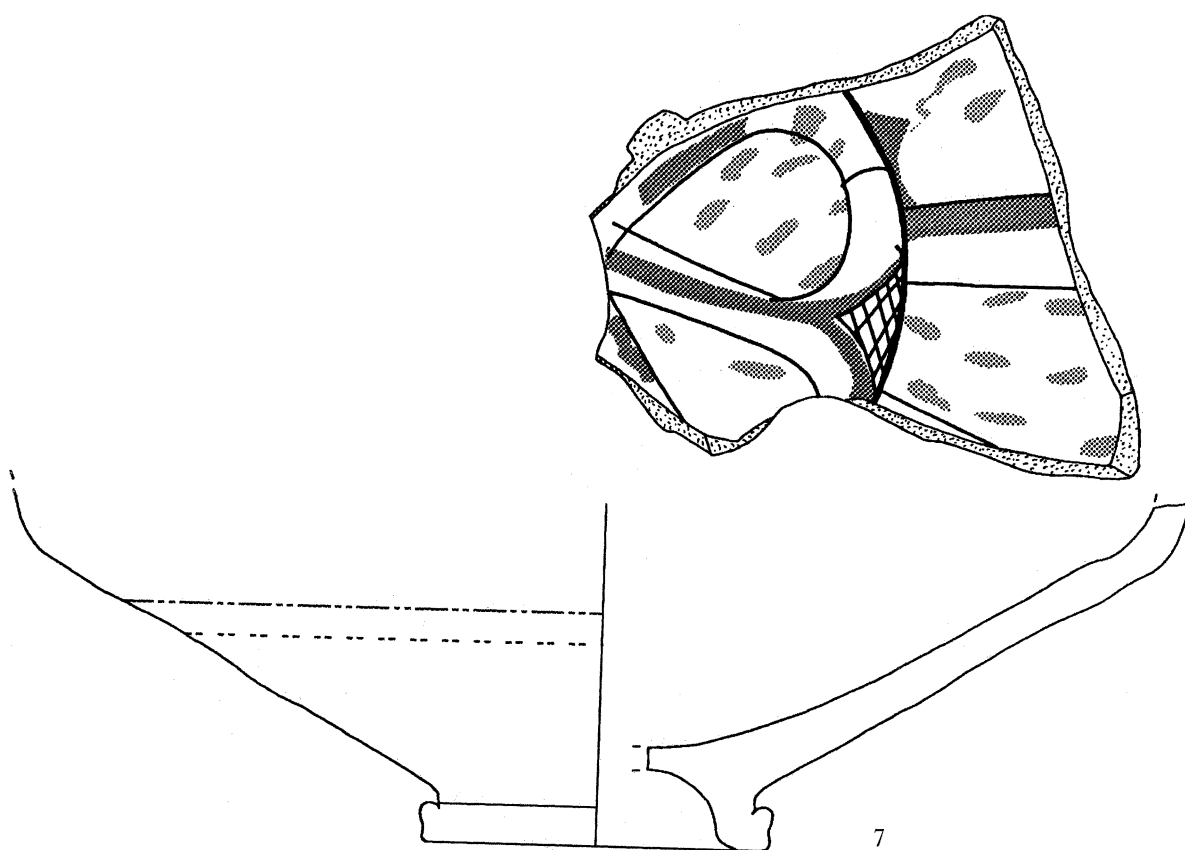


Fig. E Middle Byzantine pottery fragments (cat. nos. 1–4: scale 1:4; cat. no. 5: scale 1:2)
(drawings by Beate Böhlendorf)



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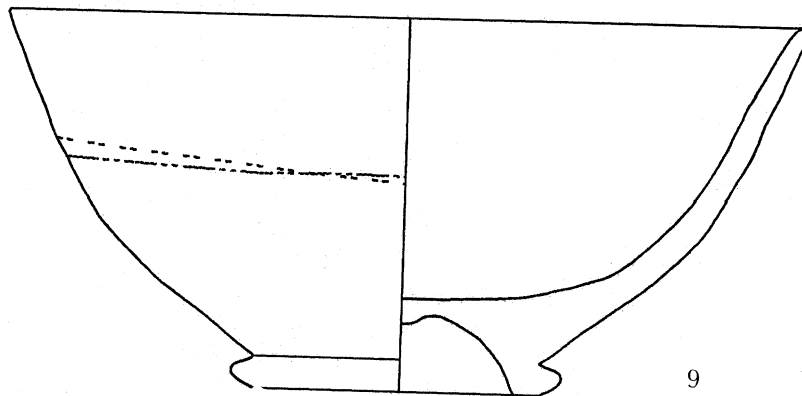
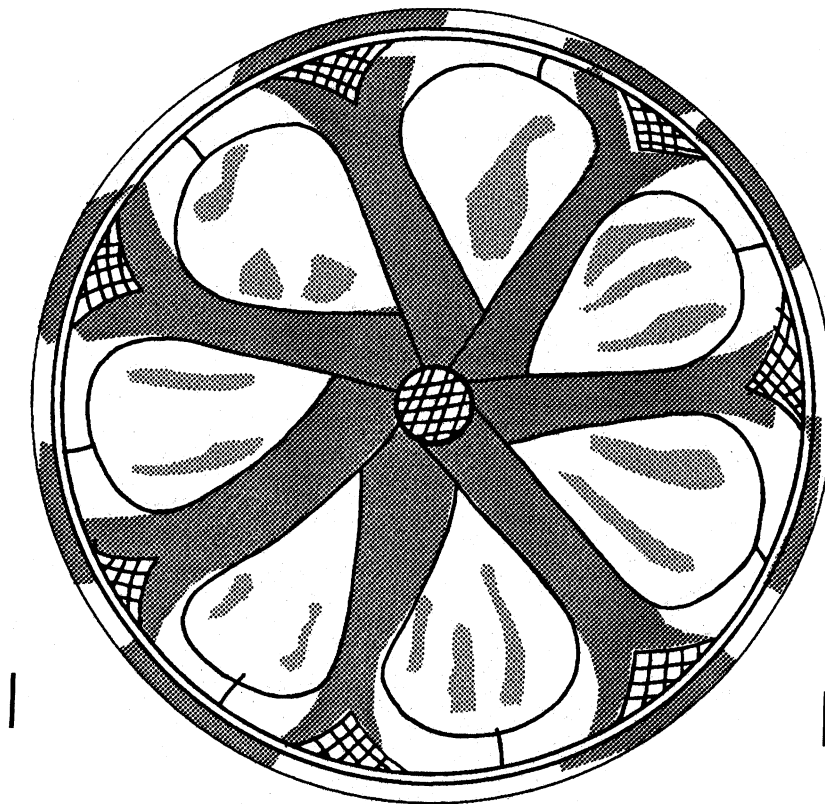


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Fig. F Late medieval pottery, painted sgraffito wares (cat. nos. 6–9: scale 1:4)
(drawings by Beate Böhlendorf)



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Fig. F *continued*

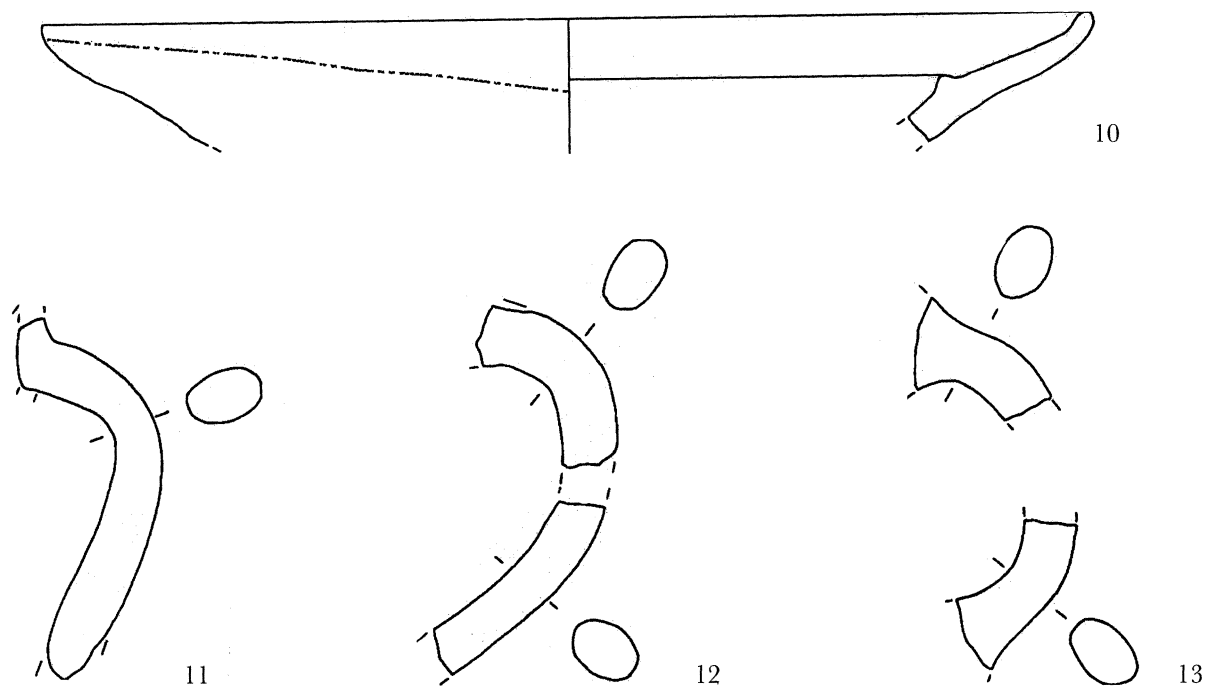


Fig. G Late medieval pottery, plain glazed wares (cat. nos. 10–13: scale 1:4) (drawings by Beate Böhlendorf)

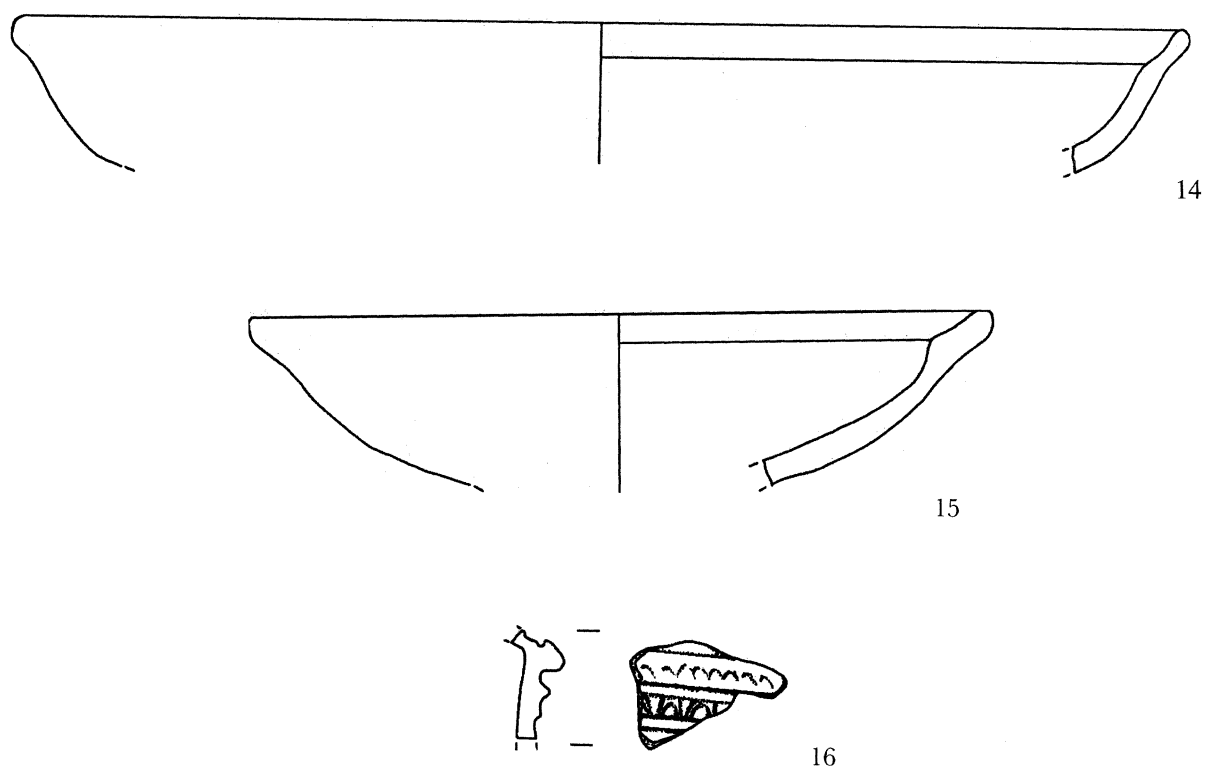


Fig. H Pottery from post-Byzantine levels (cat. nos. 14–15: scale 1:4; cat. no. 16: scale 1:2) (drawings by Beate Böhlendorf)



1 Amorium, late antique ambo slab (T967) in the north aisle of the Lower City church (Neg. AM96/07/36)



2 Lower City church, the narthex looking east (Neg. AM96/02/01)



3 Lower City church, fresco in the south aisle (Neg. AM96/02/10)



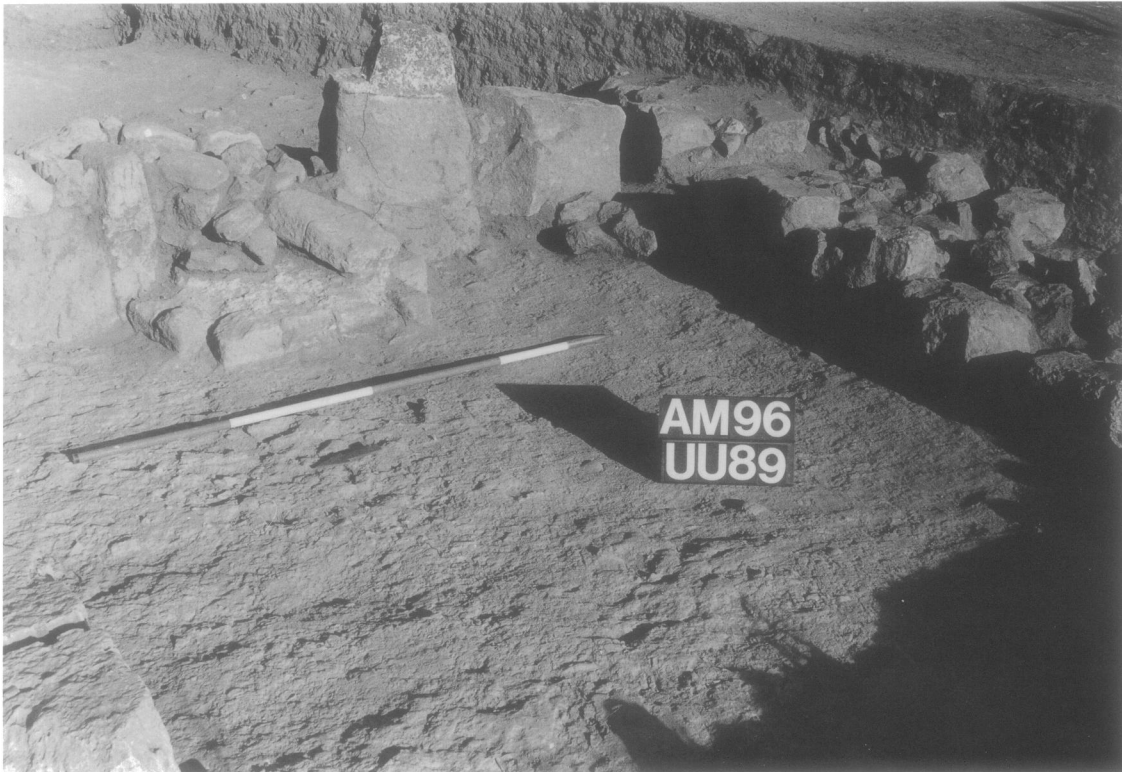
4 Lower City church, storage bin in the central bay of the south aisle (Neg. AM96/06/19A)



5 Lower City church, font (T961) in situ in the eastern bay of the south aisle (Neg. AM96/06/22A)



6 Lower City church, general view of the south aisle from the east (Neg. AM96/08/21)



7 Upper City, Ottoman room with a fireplace in Trench UU (Neg. AM96/05/22)



8 Lower City, middle Byzantine buildings inside the city wall in Trench LC (Neg. AM96/06/29)



9 Lower City, general view of the enclosure from the south edge of the Upper City mound
(Neg. AM96/01/06)



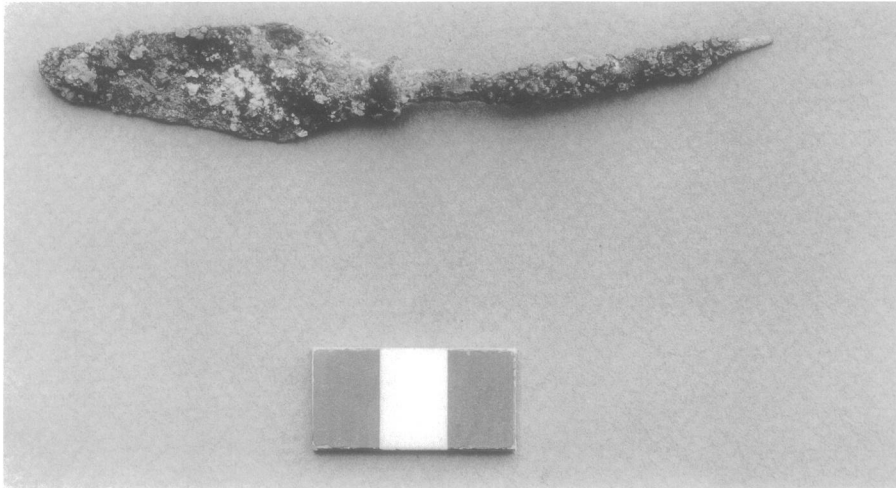
10 Lower City, general view of Trench XA showing the exterior face of the enclosure wall
(Neg. AM96/05/29)



11 Lower City, interior face of the enclosure wall in Trench XB (Neg. AM96/04/08A)



12 Lower City, detail of the exterior face of the enclosure wall in Trench XA (Neg. AM96/08/36A)



13 Iron arrowhead (SF3438) from Trench XB/Context 5 (Neg. AM96/10/28)



14 Lower City, troughs below the enclosure wall in Trench XB (Neg. AM96/07/29)



1 SF3420

2 SF3419



3 SF3418

4 SF3403

15 Four copper alloy coins recovered from Trench XA (photos: T. Çakar, from casts)

THE LOWER CITY, TRENCH AB/LC

Work in the area of the gateway and fortifications in the southwest sector of the Lower City walls (Fig. A, no. 3) started in 1988, the first year of excavation at Amorium, and has continued every year with the exception of 1990.¹¹ A large area has now been exposed, revealing a series of rooms and structures that were evidently built in this area after the fortifications had fallen into disrepair and had been abandoned (Fig. 8). The season's work entailed the removal of a massive quantity of rubble debris from the surface of the site. Below the surface rubble, numerous walls, still in a good state of preservation, were uncovered; on the associated floors, several more pottery vessels were found to add to the examples excavated in 1995.¹² It now seems clear that these cooking wares must date from the middle Byzantine period, for absolutely no sign of later Turkish occupation has been encountered in this area. One room in particular proved to be of special interest, producing a wealth of finds. This was evidently used as a living area for it had a hearth built into one wall. The floor in front of the fireplace was heavily burned and retained traces of carbonized cloth. The same room, however, also contained somewhat sinister remains in the form of a human skull and a complete flexed leg.

THE LOWER CITY, TRENCH XA/XB

One of the most prominent features in the Lower City is the ruins of a massive walled enclosure (Fig. A, no. 4; Fig. 9), lying almost at the center of the entire site between the south slope of the Upper City mound and the Lower City church. This feature had previously attracted some attention and prompted speculation about its possible function and date. It had, for example, been suggested that it represents the remains of a Roman camp, which served to house a vexillation of *legio XII Fulminata*.¹³ Another view was that it indicated the position of the main town square in the late Roman city, possibly erected at the same time

as the Lower City fortifications and church.¹⁴ But, whatever the function of the enclosure was, from both its position and its size the area undoubtedly had an important place in the history and life of the city.¹⁵

It was, therefore, decided to test the various hypotheses by putting a trench through a section of the enclosure wall and so find out about its construction and date. Another reason for undertaking a limited excavation in this area of the Lower City was to ascertain the nature of its archaeology in advance of a large-scale magnetometry survey of the site. A point was chosen on the south-facing side of the enclosure, some 25 m from the southwest corner, and a trench 5 m wide was laid out along the wall. It was decided initially to investigate the area immediately outside the enclosure, extending for 8 m from the top of the wall in a southeast direction (Fig. 10). A second trench, 10 m long, was subsequently laid out in the opposite direction inside the enclosure.

On both sides of the enclosure wall there was a thick layer of rubble collapse, evidently from the wall itself. Once this had been cleared, the full width of the wall and its general appearance could be ascertained. The wall is 2.35 m thick and has a core consisting of rubble masonry and a gritty, white mortar. The wall surfaces are constructed from medium-sized, roughly squared masonry blocks set in horizontal rows and interspersed with a few brick fragments. The interior face is the better preserved (Fig. 11). The wall was excavated right down to its foundations on both sides, which revealed that it comprised two distinct phases. On the interior face the first (lower) phase was clearly marked by scorch marks on the surfaces of the blocks in its uppermost row and by associated ash layers in the southwest section.¹⁶ On

¹⁴C. S. Lightfoot, "The Survival of Cities in Byzantine Anatolia: The Case of Amorium," *Byzantion* 68.1 (1998), 69.

¹⁵It was learned during the course of the season that the enclosure had been excavated by villagers many years ago, in part merely to obtain building stone. The results of this activity can be clearly seen in the deep pits left in the enclosure wall, especially along its east side. One elderly villager, who admitted to having taken part in this illegal digging, also affirmed that substantial buildings had been found within the enclosure, some of which had once had marble floors.

¹⁶Samples were taken from this ash layer for C-14 dating, the results of which are still awaited.

¹¹DOP 51 (1997), 297–98.

¹²*AnatSt* 46 (1996), 106. The vessel in fig. 7 is wrongly described as "Seljuk"; compare DOP 51 (1997), 298.

¹³S. Mitchell, *Anatolia: Land, Men, and Gods in Asia Minor*, I (Oxford 1993), 121 and n. 23.

the exterior, on the other hand, part of this earlier phase of the wall had been robbed and backfilled with earth before the construction of the second phase (Fig. 12). At the base of the enclosure wall in Trench XB a small area of tiled floor was encountered (Fig. B); this presumably represents all that remains of the ground surface associated with the wall.

In the trench outside the enclosure wall were found four copper alloy coins (see below, pp. 331–32 and Fig. 15). The enclosure wall itself also points to a mid-Byzantine date for both of its phases, since the two phases resemble each other closely, while in comparison with the other structures so far excavated at Amorium the nearest parallel is the second phase fortification wall of the Upper City mound. This has tentatively been dated to the tenth to eleventh centuries.¹⁷ The enclosure should probably be assigned a military purpose since the outer wall was clearly intended to be defensive, and it may represent the headquarters, barracks, stables, and depots of the thematic troops that were based at Amorium in the tenth and eleventh centuries.¹⁸

The small finds from either side of the wall were markedly different. Outside the enclosure, large quantities of glass vessel and glass bracelet fragments were encountered, and a small number of terracotta loom weights was also recovered.¹⁹ By contrast, the trench inside the enclosure produced large amounts of animal bone. Both trenches also contained many iron objects (principally nails), but it was only inside the enclosure that two iron arrowheads and an iron knife blade were found (Fig. 13).²⁰

¹⁷DOP 51 (1997), 299.

¹⁸Early-10th-century Arab sources provide a list of the Byzantine forces stationed in the eastern provinces of the empire; see M. Whittow, *The Making of Orthodox Byzantium, 600–1025* (Basingstoke-London, 1996), 184 (also published by the University of California Press under the title *The Making of Byzantium, 600–1025*). The army of the Anatolikon theme stands out as by far the largest of these with a nominal strength of 15,000 men, many of whom were presumably based at Amorium, the provincial capital.

¹⁹So, for example, the contrast in the number of bracelet fragments recovered from Trench XA outside the enclosure (57 fragments) and from XB inside the wall (7 fragments) is particularly striking. These, together with the other glass finds from the season's work, will be studied in detail by Margaret Gill during the summer of 1997.

²⁰For the arrowhead (SF3438; L. 10.6 cm), compare G. R. Davidson, *Corinth*, XII: *The Minor Objects* (Princeton, 1952), 200, pl. 91 (nos. 1529–30).

Large quantities of pottery sherds were recovered from both trenches. This material, which has still to be studied in detail, includes a wide variety of wares and offers an opportunity to develop both a typological and a chronological sequence stretching back from the middle Byzantine period into the Dark Age. Preliminary inspection of the finds revealed that the pottery included plain cooking wares and a number of decorated wares (glazed, painted, burnished, and relief wares). In addition, several fragments of “metropolitan” glazed ware were found, indicating that some luxury pottery was imported from Constantinople during the eighth and ninth centuries.

Below and partially cut by the enclosure wall were found three stone troughs, one being outside and the other two inside the wall (Figs. C, D, and 14). They had all been carved out of single blocks of stone and had been arranged in a line so that the narrow ends of the troughs touched each other. The blocks had been hollowed out to form shallow troughs measuring 0.36 m wide and 0.14 m deep; the exposed narrow end of two of the troughs had been squared off, while the other end of the middle trough was rounded. This shaping gave the troughs the appearance of sarcophagi, but the depth of their interiors and the presence of small drainage holes cut into two of them would seem to imply some other use. A short stretch of loose rubble wall, aligned with the troughs, was also exposed immediately inside the enclosure. These features have yet to be fully investigated and explained, but their very existence under the enclosure wall is of great significance, for they show that this area of the city had a quite different layout, orientation, and use before the construction of the enclosure.

BONES (by Julie A. Roberts)

The study of the human remains produced some unexpected results. A total of 2,240 bones were examined, most of which had been recovered from the rock-cut tomb (MZ01) in 1995.²¹ Analysis of this material is not yet complete, but to date 51 adults and 22 subadults (aged less than 18 years old) have been iden-

²¹*AnatSt* 46 (1996), 97–102.

tified. This information confirms the view gained from the sparse grave goods, namely, that the tomb was in use over a very long period of time.

All of the remains were disarticulated, with the exception of a complete flexed leg found in LC5/Context 8 during the 1996 season. The majority were fragmentary, although several crania from the rock-cut tomb were in a better state of preservation. Six intact long bones (from LC5 and MZ01) enabled an estimate of stature to be calculated, while close examination of the cranial and pelvic morphology and the dimensions of the articular surfaces of long bones enabled the determination of the sex of some individuals. Age at death was calculated by observation of the development and eruption of teeth, the auricular surface and pubic symphysis of the pelvis, the epiphyseal fusion of long bones, ectocranial suture closure, and the appearance of the sternal ends of ribs. The following table shows the number of individuals, divided by sex, that has been identified in each area of the site.²²

| Area | Male | Female | Subadult | Unknown | Total MNI |
|------|------|--------|----------|---------|--------------|
| MZ01 | 19 | 16 | 22 | 16 | 73 |
| TT | 3 | 2 | 3 | 4 | 12 |
| ST | 1 | 1 | 1 | 3 | 6 |
| LC | 3 | 0 | 0 | 1 | 4 |
| A2-1 | 0 | 0 | 0 | 1 | 1 |
| AB | 1 | 0 | 0 | 0 | 1 |
| D | 0 | 0 | 0 | 1 | 1 |

MNI = minimum number of individuals

The height of seven individuals was calculated, two from LC and five from MZ01. Those from LC were both male and measured 1.75 m and 1.78 m (5'7" and 5'8"). From the rock-cut tomb three males were found to be 1.69 m, 1.70 m, and 1.76 m (5'5", 5'6", and 5'7") tall, while two females had an estimated height of 1.64 m and 1.535 m (5'3" and 5'). Several of the bones that have been examined were large and robust, having pronounced muscle inser-

tions (particularly *pectineus*, an adductor and flexor muscle used extensively in activities such as horseback riding).

The most common pathology identified was dental disease. There were numerous examples of antemortem tooth loss, a phenomenon that is commonly caused by periodontal disease. Carious lesions also occurred frequently, and the two conditions may be linked to a combination of poor dental hygiene and a diet high in carbohydrates and sugar. There was relatively low prevalence of degenerative joint disease, which, together with the suggested diet and stature, might indicate that the deceased had enjoyed a relatively high standard of living and belonged to a high social class.

There were few examples of traumatic injury. Those identified included a fractured humerus that was well healed but badly set, a fractured fibula that had subsequently become infected, and a fractured and partially healed tibia. The fractured and infected clavicle of a neonate (newborn baby) may represent an injury that occurred in utero. An x-ray of a misshapen vertebra proved that the deformation was the result of a fracture rather than of a congenital condition. In addition, two cases of maxillary sinusitis were identified. There were few examples of periostitis, a type of superficial bone infection commonly found in archaeological populations, and this again suggests that a good standard of living was enjoyed by these individuals.

FRESCOES

A second important study started this year was that of the fresco fragments from the Lower City church. This work, undertaken by Christine Zitrides, aims to inventory and classify all the fragments recovered from the church since its excavation began in 1990. More than eighteen thousand pieces of painted plaster and thirty-five masonry blocks that still have fresco adhering to their surfaces were studied during the season, the information from which is now being collated and made into a database. The results from the database will be ready before the start of the 1997 season, when it is hoped that the study of this interesting and important group of material will be continued.

²²These represent trenches on the Upper City mound (TT and ST) and in the Lower City (LC, AB, D, and A2), the latter being the church. MNI = minimum number of individuals, calculated by the identification of repeated skeletal elements.

DECORATED STONES

Numerous examples of sculpted stone excavated from the Lower City church preserve traces of the original polychrome decoration. Close visual inspection with the unaided eye and a low magnification ($\times 5$) hand lens can reveal the range of colors used as well as the patterns of color applied to the sculpted surfaces. In 1996 a special study of this material was carried out by Elizabeth Hendrix using techniques that she had developed while working in the Athenian agora. This was the first time that such techniques had been applied on an archaeological site in Turkey.²³ Ultraviolet reflectance photography can, in some cases, enhance traces of the polychromy. It was tested on selected examples of carved stone from the church that either still preserve traces of paint or were believed to have been painted. Normal daylight photography, both color slides and black and white negative film, were also used to document the stones for purposes of comparison and to provide information regarding color and form to augment the ultraviolet reflectography. Finally, colored drawings were made to map extant traces of paint. Once the photographic results have been studied in detail, another set will be made in order to illustrate the reconstruction (or possible reconstruction) of each stone as it appeared when the paint was first applied.

In addition, samples of paint from stones representing the two major building phases of the church were also taken for analysis in order to identify the actual pigments used at Amorium. It should be possible to determine whether the artisans continued to use the same pigments in the middle Byzantine reconstruction of the church as were used in the original building during the late fifth or early sixth century or whether pigments changed in the course of time. The analyses should also provide some insight into the artists' technique.

Some of the preliminary results from the examination of fifty-seven sculpted blocks in-

clude the range of colors used to embellish the stone (red, black, blue, and yellow) and the application of the paint, following the form of the carving to some extent, but crossing forms on occasion or only partially coloring forms on other occasions. It was also clear that symmetry of color was not always intended, as opposing forms might be the same color on one part of a stone and different colors on another section of the same stone. These initial conclusions show that the painting of stones at Amorium was an art in its own right, changing as well as enhancing the appearance of the carved stone surfaces that embellished the Lower City church.

INSCRIPTIONS²⁴

As in previous seasons, the number of epigraphic fragments recovered in 1996 was small and all of the recovered pieces contained only very short texts. Three examples were found during the excavations in the Lower City church (T851, T902, and T945), while another (T975), overlooked when first found in 1993, also comes from the same location. One of these (T851) is part of an inscribed frieze block of Roman date that had been reused in one of the narthex walls. Of greater interest is a column shaft fragment (T902) in gray veined marble inscribed with the letters ΘΙ (or ΙΘ = the numeral 19), not, perhaps, a mason's mark per se, but rather part of the column numbering system used by the builders of the church, similar to the letters Α' and Β' noted on the stylobate in 1995.²⁵ The remaining fragments are unprovenanced surface finds, among which is an attractive ciborium spandrel fragment (T952) in white marble, inscribed along the top and decorated with a twisting acanthus design in low relief below. It was donated by Recep Dinçer, who stated that he had found it in the ruins of an old house in Emirdağ; it probably came originally from Amorium.²⁶

²³A report on this research was delivered at the Archaeological Institute of America's 98th Annual Meeting, held in New York in December 1996; cf. E. A. Ivison and E. Hendrix, "Reconstructing Polychromy on Middle Byzantine Architectural Sculpture," *AJA* 101.2 (1997), 387.

²⁴A corpus of inscriptions recorded at Amorium between 1993 and 1997 is now being prepared for publication by Thomas Drew-Bear.

²⁵*DOP* 51 (1997), 293.

²⁶The inscription has been read by Cyril Mango as . . . το κ(αὶ) κοπιακότη το κ(αὶ) τ . . .

COINS

Thirty-four coins were recorded during the 1996 season, of which twenty came from excavated contexts, while the remaining fourteen coins are surface finds.²⁷ The coins were cleaned and consolidated on site by the project's conservator, Karen Barker, and casts were made for future reference and further study. At the end of the season all of the coins were deposited in the Afyon Archaeological Museum. Since the inception of the project a total of 231 coins have been recorded. This year's finds follow the same chronological pattern as has been met with in previous seasons.

The corpus includes three late Roman coins (SF3401, SF3417, and SF3424), one of which was found in the Lower City church. The Dark Ages are represented by two, possibly three, issues (SF3591, SF3631, and SF3572), while of even greater importance are the four copper alloy coins dating to the first half of the ninth century, representing issues of Nicephorus I, Leo V, and Theophilus (SF3420, SF3402, SF3613, and SF3406). In addition, there are examples from the reigns of Leo VI and Romanus I from the late ninth and first half of the tenth century (SF3632 and SF3411). The rest of the middle Byzantine finds are anonymous and signed folles. Those from excavated contexts include one example from the church (SF3416), two from Trench LC (SF3404 and SF3408) in the area of domestic occupation behind the Lower City walls, and three from Trench XA in the Lower City immediately outside the enclosure wall (SF3418, SF3419, and SF3403). The latter group includes a signed follis of Romanus IV. These finds, together with the associated pottery assemblages, would appear to confirm that areas of the Lower City were occupied in the tenth and eleventh centuries, but that they were subsequently abandoned and not reused in the Turkish period. By contrast, Trench UU on the Upper City mound has produced a large amount of late (Seljuk and Ottoman) material, including significant quantities of glazed pottery and Ottoman pipe bowl fragments. Two Islamic coins

(SF3421 and SF3422) were also recovered from this trench, one of which may be a Seljuk copper coin, while the other is the silver *para* of the Ottoman sultan Mustafa III, dated 1769.²⁸

Here only the details of the four coins recovered from the area outside the enclosure are offered (Fig. 15).²⁹

1. Nicephorus I (802–811); AM96/XA13/SF3420; from the Lower City, 27.07.96; AE, follis, class 2; 24–23 mm; 6.1g; 6h.
Obv. Two busts facing, Nicephorus on l., Stauracius on r. wearing loros.³⁰
Rev. Large M, cross above, A below; to l., XXX; to r., NNN. *DOC* III.1: 358; P. Grierson, *Byzantine Coins* (Berkeley, Calif., 1982), no. 700.
2. Anonymous follis, Class A2 (976?–ca. 1030/35); AM96/XA13/SF3419; from the Lower City, 24.07.96; AE; 31–28 mm; 12.2g; 6h.
Obv. +EMMA NO[VHA]; bust of Christ facing, with cross-nimbus and holding book; in field, IC [XC].
Rev. +HSUS / XRIST[US] / BASILEU / BASILE. *DOC* III.2: 670 (var. 43).
3. Anonymous follis, Class C (1042?–ca. 1050); AM96/XA12/SF3418; from the Lower City, 26.07.96; AE; 28–26 mm; 9.4g; 6h.
Obv. +EM[M]A N[O]VHA; three-quarter-length figure of Christ Antiphonetes, with cross-nimbus having pellet on each arm, holding book; in field, IC XC.
Rev. Jeweled cross with pellet at end of each arm and IC XC / NI KA in angles. *DOC* III.2: 681–82.
4. Romanus IV (1068–71); AM96/XA / Context 1/SF3403; from the Lower City, subsoil outside enclosure wall, 18.07.96; AE; 27 mm; 4.5g; 6h.

²⁸N. Pere, *Coins of the Ottoman Empire* (Istanbul, 1968), 216, no. 639; G. Şahin, "Battalaltı Definesi," *Kayseri Müzesi Yıllığı* 1 (1987), 29–32, esp. 31.

²⁹Each coin is described, and details of its size, weight, and die-axis are given. Square brackets indicate where the legend is illegible and has been restored.

³⁰The obverse is badly corroded, but a cross can just be discerned in the field above and between the two imperial busts. It is, therefore, preferable to identify this coin as an issue of Nicephorus I rather than of one of his successors, Leo V or Michael I.

²⁷The latter include seven coins generously donated by one of the workmen, Mustan Ateş, while another four examples were handed in by Ali Özcan.

Obv. Bust of Christ facing; in field, $\overline{\text{IC}} \overline{\text{XC}}$ over $\overline{\text{NI}} \overline{\text{KA}}$.

Rev. C R / P Δ; Latin cross with X at intersection and one large and two small pellets at end of each arm. Overstruck on an anonymous follis of Class G. *DOC* III.2: 796–97 (8.16); Grierson, *Byzantine Coins*, no. 997.

GLAZED POTTERY FROM TRENCH TT (by Beate Böhlendorf)

In 1994 and 1995 an area, designated as Trench TT, was excavated on top of the Upper City mound.³¹ During these excavations, features and floors associated with the Turkish occupation of Amorium appeared in the upper levels.³² A real surprise here was the discovery of a middle Byzantine potter's kiln, the only example of such a structure so far for this period in Anatolia.

The structures that lay stratigraphically between the Ottoman contexts and the level associated with the kiln comprised a number of small rooms and produced a variety of medieval ceramics, coarse as well as glazed wares. The lower kiln levels produced Byzantine cooking pots and glazed ceramics, together with residual late Roman and Sagalassos ware.³³ In addition to the kiln itself, the recovery of a considerable quantity of wasters and misfired pottery, although in slightly higher levels, indicates that an active pottery and brick production center existed in Amorium at this time. The pottery from this stratigraphical context forms the subject of the following catalogue.³⁴

³¹*AnatSt* 45 (1995), 121; C. Lightfoot, "Excavations at Amorium," *Anatolian Archaeology: Reports on Research Conducted in Turkey* 1 (1995), 5; *DOP* 51 (1997), 298–300.

³²*AnatSt* 45 (1995), 121–22. The date of the latest Ottoman occupation was, however, only ascertained in 1996 (see above, p. 326).

³³*AnatSt* 46 (1996), 105.

³⁴The study of the Byzantine pottery was begun only in 1996. Last season's work was restricted in time and scope, and, as a consequence, this report is limited to a discussion of certain selected examples of glazed pottery. It is hoped that in 1997 a full study of all the pottery from Trench TT will be carried out.

Key: D. = diameter of rim; DF. = diameter of foot; DH. = diameter of handle; H. = height. All measurements are in centimeters. Slip and glaze are to be taken as appearing on both the inside and the outside of each example, unless stated otherwise. The height of the appli-

Fabrics³⁵

Fabric 4: reddish yellow to brown (C9–10, D9–12, E9), on occasions fired partly gray (A7–10, B7), very fine grain, sandy, small fine pores (round, elongated). Soft.

Fabric 6: reddish yellow to brown (C9–10, D11), gritty, fine pores (round). Hard, smooth fracture.

Fabric 7: reddish yellow to brown (C9, D11), gritty, sandy, very porous (round, oval, elongated). Soft, rough crumbly fracture.

Fabric 9: reddish yellow to brown (C9–10, D10–12, E10), much fine gold mica, sandy, very porous (round, oval, elongated). Soft.

Fabric 10: brown (D10–11, E10, E12), gritty, fine gold mica, fine pores (round). Soft.

Fabric 13: brown (D10–11, E9–10), very gritty, quartz, many fine pores (round, elongated). Soft, cracked fractures.

Fabric 14: brown (D10, E9, E11), much fine gold mica, quartz, fine pores. Cracked fractures.

Middle Byzantine Pottery (8th–first half of 9th century)

1. AM95/TT114 (11): from north of the kiln (Fig. E, 1).

Red painted ware: body sherd. Fabric 7 (C10). Decoration: small red line on the outside (8E5, reddish brown).³⁶

2. AM95/TT115 (37): fill of pit 119 (Fig. E, 2).

Plain glazed ware: flat bottom of a jug(?). DF. 9.2. Fabric 13 (E10). Thin glaze on the outside and under the bottom without slip (5D7, golden brown), rough surface.

3. AM95/TT122, 128, 131 (13, 14): fill of city wall construction trench (Fig. E, 3).

Incised ware: six rim sherds of a shallow bowl with triple molding on rim. D. 23.2.

cation of slip and glaze is shown in the illustrations by dotted lines. The colors of the glaze and their designation are given according to the "Lexikon der Farben"; see A. Korn-erup and J. H. Wanscher, *Taschenlexikon der Farben* (Zürich-Göttingen, 1981).

³⁵In this report only fabrics represented in Trench TT are listed. Specimens of the color of the biscuit were determined according to C.E.C. Color Charts.

³⁶Pottery with this decoration has also been found in other trenches at Amorium, but it is especially common on the Upper City mound.

Fabric 4 (A9, C10). Glaze without slip, inside different coloration (4D6, 4E4, amber yellow, olive), outside up to 1.95 (4D6, honey yellow), bubble holes. Rough, dull surface. Decorated on the inside of the molded rim with a relief tooth cutting, while the body has an incised pattern under the glaze, visible on three of the sherds; one depicts the head of a bird, the other two have part of a loop motif. On the outside, an incised wavy line in the form of a shallow groove.³⁷

4. AM95/TT128 (36): layer below Context 67 (Fig. E, 4).

Plain glazed: rim of a small bowl. D. 13.8. Fabric 6 (D11). Shiny glaze without slip (between 5C8 and 5D8, brownish yellow to yellowish brown), fine crackled.³⁸

5. AM95/TT146 (44) (Fig. E, 5).

Plain glazed: small handle of a cup(?). DH. 0.55/0.8. Fabric 4 (C9). Thick glaze of good quality (29E8, deep green) without slip.

Late Medieval Pottery (second half of 13th–14th century)

6. AM95/TT67 (58): open area outside structure, mixed with middle Byzantine wasters (Fig. F, 6).

Painted sgraffito ware: rim of a deep bowl. D. 25.6. Fabric 10 (D11). Slip (B1), glaze inside (28A4, pastel green), outside up to 4.1 (27B5, grayish green), thin glaze with fine cracks. Decoration: sgraffito and oxide painting with irregular stripes (5E6, 27E7, mustard brown, grayish

green). Motif: leaves and triangles hanging from the lower of three rim circles.

7. AM94/TT53 (41): floor surface of a room (Fig. F, 7).

Painted sgraffito ware: bottom with molded ring base and deep slanting sides. DF 9.7. Fabric 14 (E10). Slip inside, outside up to 5.35 (E2), glaze inside (1A4, pastel yellow), outside up to 6.2 (27C6, grayish green), glaze dull and cracked. Decoration: sgraffito and oxide painting with stripes (27F6, dark green) and dots (27D8, deep green). Motif: leaves and crosshatched triangles hanging from a circle.

8. AM95/TT67, 109 (54): same context as for nos. 6, 9, and 11 (Fig. F, 8).

Painted incised sgraffito ware: rim of a deep bowl. D. 25.2. Fabric 10 (D11). Thick slip (B1), glaze inside (2A4, pastel yellow), outside (28B7, 5E5, green, bronze brown), dull, sintered glaze with bubble holes. Decoration: incised sgraffito and oxide painting with stripes (6F3, 28A6, 29E8, coffee brown, green, deep green). Motif: three rim circles and radial lines.

9. AM95/TT67 (47): same context as for nos. 6, 8, and 11 (Fig. F, 9).

Painted sgraffito ware: deep bowl with molded ring base, deep curving wall and rounded rim. D. 21.0; DF 8.7; H. 9.8. Fabric 9 (D12). Slip inside, outside up to 3.55–4.55 (B1), glaze inside (30B5, grayish green), outside up to 3.8–4.45 (27B5, grayish green), glaze dull and cracked. Decoration: sgraffito and oxide painting with stripes (27D6, grayish green) and splashes (6E4, brown). Motif: leaves and crosshatched triangles hanging from the lower of two rim circles. The base of the leaves spring from a central crosshatched circle.

All of these vessels bear a clear similarity in terms of fabric, profile, and decoration/motif to a Byzantine ceramic group from Pergamon, which may imply the same production center.³⁹ This type of

³⁷ Hayes dated pottery with this type of fabric, glaze, and form to the 7th century; see J. W. Hayes, "A Seventh-Century Pottery Group," *DOP* 22 (1968), 203–16, esp. 203–5, fig. C16. The Sarāḫane material, however, does not include any specimens with incised decoration, so the example from Amorium may be later. The decoration on the Sarāḫane Glazed White Ware Group I (pottery with white biscuit, dated to the 8th century) is similar to the decoration of the Amorium bowl; see J. W. Hayes, *Sarāḫane in Istanbul, II: The Pottery* (Princeton, N.J., 1992), 15–17. Also belonging to the 8th century are some chafing dishes from Aegina that have a similar decoration on the rim and incised motif; see F. Felten, *Die christliche Siedlung, Alt-Ägina 1.2* (Mainz, 1975), 75–76, pl. 28, 156. Also found at Aegina were chafing dishes with a red biscuit and brown glaze.

³⁸ For this type, see Felten, *Die christliche Siedlung*, 74–75, pl. 19, 146.

³⁹ The so-called Keramik mit grünen und purpurnen Flecken group; see J.-M. Spieser, *Die byzantinische Keramik aus der Stadtgrabung von Pergamon*, Pergamenische Forschungen 9 (Berlin, 1996), 49–50. Spieser does not ar-

pottery is also found at Ephesos, Metropolis, and Sardis in Byzantine contexts, indicating a wide distribution in western-central Anatolia.⁴⁰

10. AM94/TT53 (35): same context as for no. 7 (Fig. G, 10).

Plain glazed: rim of a flat bowl with inner edge. D. 28.2. Fabric 7 (D12). Thick slip (E2), speckled glaze (27F7, 27D8, dark green, deep green), outside up to 0.45–1.9, glaze of poor quality, iridescent with many cracks.

11. AM95/TT67, 109 (50): same context as for nos. 6, 8, and 9 (Fig. G, 11).

Plain glazed: handle. DH. 1.4–2.15 and 1.45–2.1. Fabric 9 (D11). Slip (E1), glaze of poor quality (28F7, dark green), very crackled.

12. AM95/TT109 (48): open area outside structure (Fig. G, 12).

Plain glazed: handle. DH. 1.45–1.95 and 1.5–2.2. Fabric 10 (D10). Slip (E1), speckled glaze (28F3, 28B3, dark green, grayish green), glaze of poor quality, iridescent, very crackled, bubble holes.

13. AM95/TT109 (49): same context as for no. 12 (Fig. G, 13).

Plain glazed: handle. DH. 1.5–1.9 and 1.6–2.2. Fabric 9 (D11). Slip (E1), speck-

led glaze (28E8, 28D7, 28C3: deep green, grayish green, Nile green), glaze of poor quality, very iridescent, very crackled, bubble holes.

Pottery from Post-Byzantine Levels

14. AM94/TT26 (46): fill of late medieval dwelling (Fig. H, 14).

Plain glazed ware: rim of shallow bowl. D. 31.2. Fabric 10 (E10). Slip, glaze (inside: 27E7, grayish green; outside: 26B5, grayish green).

15. AM95/TT49 (39): pit fill (Context 28), cut into fill of dwelling (Fig. H, 15).

Plain glazed ware: rim of a flat bowl. D. 19.6. Fabric 4 (A10/E10). Inside glaze without slip (speckled 5E7, 5F6, lino-leum brown, tobacco brown), glaze of poor quality with many bubble holes and cracks.

16. AM95/TT49 (38): same context as for no. 15 (Fig. H, 16).

Relief ware: body sherd of a bowl(?). Fabric 4 (B7). Thick, shiny glaze without slip (inside: speckled 28E8, 28F6, deep green, dark green; outside: 4D8, olive). Decoration: well-molded band of egg and dart under a massive ridge.

Conclusions and Prospects

The pottery from Trench TT shows—as does the material from other contexts—that the typical middle and late Byzantine sgraffito wares, well known from other Byzantine sites such as Ephesos, Metropolis, Pergamon, and Sardis, are not represented at Amorium. On the other hand, the glazed pottery in the Seljuk levels belongs to the group of late Byzantine painted sgraffito wares. It remains uncertain whether these vessels were produced locally by Turkish potters, whether there was Byzantine pottery production at Amorium during the Seljuk period, or whether the pottery was imported from Byzantine merchants. The study of this corpus of material will be of fundamental interest for the analysis of social changes after the Seljuk occupation of Amorium and may shed new light on the nature of Seljuk rule.

The middle Byzantine pottery of the kiln area with its wide range of glazed, painted, and

range the fabrics clearly into groups, but he mentions “Die äußere Fläche, wenn nicht von der Glasur bedeckt, zeigt oft ein ‘fettes’ oder sodar ‘seifiges’ Aussehen” of the unglazed body; see *ibid.*, 49. These characteristics can also be seen on the sherds from Amorium. For profiles and decoration, see *ibid.*, pl. 52 and pl. 10, 163, respectively.

⁴⁰E. Parman, “Ayasoluk Tepesinde Bulunan Bizans Keramikleri” (Ph.D. diss., Ankara, 1978), 83, inv. no. 77, illus. 60a (Parman’s transitional Byzantine/Seljuk pottery); at Metropolis (Torbalı), in a 13th-century context from Byzantine buildings in the upper levels of the theater, find nos. Ti. 94.5, Ti. 94.83; and at Sardis, inv. no. 23 (the Islamic painted sgraffito ware from Sardis is quite different; see H. G. Crane, “Preliminary Observations on the Glazed Pottery of the Turkish Period from Sardis,” *BASOR* 228 [1978], 51–54, fig. 7).

This ware is also regarded as of Byzantine manufacture by J. Soustiel, *La céramique islamique*, VI: *La céramique traditionnelle byzantine du IXe au XIVe siècle* (Paris, 1985), 142–44, pl. 168 (from Constantinople). One may also note the excavation of “late Byzantine” houses (Areas Z13 and Z14) within the ruins of the Roman baths at Hierapolis in Phrygia; here, too, sgraffito ware has been found, together with other pottery, identified as Seljuk; see S. Yılmaz, “Denizli, Hierapolis (Pamukkale) antik kenti Roma hamamı sondaj kazısı ve temizlik çalışmaları,” in *IV. Müze Kurtarma Kazıları Semineri*, 26–29 Nisan 1993, Marmaris (Ankara, 1994), 202–3, pls. 21–26.

coarse wares provides an important body of evidence for pottery production in central Anatolia at this time. Currently there is still a lack of material from the Byzantine "Dark Ages" in the whole of Anatolia, so this material and the study of the pottery production at Amorium will be crucial for our future understanding of Byzantine ceramics.

CONCLUSION

The season's work has allowed us both to confirm certain views about the history of the site and to develop new insights and theories. So, for example, the archaeological evidence has confirmed that there was a prosperous, if small, Turkish settlement at Amorium, centered on the Upper City mound, until the latter part of the eighteenth century and that for some unknown reason this was abandoned soon thereafter. Further research in the Ottoman archives is required to explain this phenomenon, but it would seem to be part of a more general trend in which a number of villages in the Emirdağ-Bolvadin area were abandoned in the early nineteenth century.

Sufficient evidence has now been collected from Trench AB/LC to allow a good understanding of the history of the Lower City fortifications and of the domestic buildings that succeeded them. The city walls were built in the late antique period, while the houses date to that of the Byzantine revival in the tenth and eleventh centuries. The 1996 season added further valuable information, especially as it proved that there is no trace of any structures or occupation of the area immediately behind the defensive wall north of the gateway during the intervening period of the Byzantine Dark Ages. These excavations also confirmed the lack of any Turkish occupation in this outlying area of the site.

Likewise, there was no sign of any post-Byzantine activity in Trench XA/XB situated in the middle of the Lower City. This in itself was a significant discovery, indicating that land in the very center of the site was devoid of later Turkish remains and that there were undisturbed middle Byzantine and Dark Age levels immediately below the modern ground surface. This new trench also proved to be immensely valuable because it provided good evi-

dence for the construction and use of a major new complex, which perhaps had a military function, during the period of the Byzantine revival. Further work, including nonintrusive survey of the whole area, is planned for future seasons in the hope of establishing the enclosure as a middle Byzantine military compound. The discovery in 1996 may thus provide important new information about the Byzantine army on the ground, since it would be the first example of such a base to be identified.

By contrast, the excavations within the Upper City have shown that there was a prosperous and vigorous community living there in middle Byzantine times. As well as evidence for an industrial quarter, domestic buildings, complete with large storage jars, have been found, while the outline of a church can still be traced on the present-day surface of the mound.⁴¹ Indeed, the evidence would seem to suggest that at least from the second half of the ninth century the Upper City formed the nucleus of the Byzantine settlement. The inhabitants of Amorium, however, continued to make use of areas within the Lower City, even though this was now unprotected and lay outside the walls. For, as well as continuing to use and look after the church, some of the middle Byzantine population of Amorium lived in housing constructed on top of and behind the ruins of the Lower City walls.

Nevertheless, the presence of the fortified enclosure in the Lower City may perhaps indicate a reversal of roles for the Lower and Upper City areas after the Byzantine Dark Ages. The construction around the Upper City of a separate circuit of walls made of spolia from the Roman city should probably be associated with the establishment at Amorium of the headquarters of the *magister militum per Orientem* in the 640s.⁴² So, while the civilian inhabitants continued to look to the Lower City walls for protection during the troubled times of the seventh and eighth centuries, it is likely that the military command took up its position in the most suitable defensive position, the Upper City.

⁴¹This building has not yet been investigated, but it would appear to be smaller in length than the Lower City church.

⁴²*Byzantion* 68.1 (1998), 64–65.

In 1997, the last year in the second five-year cycle of work at Amorium, efforts will be concentrated on the study of the material that has already been excavated and the preparation

of an interim report for the years 1993–97. Plans are now being made for the next campaign that will take the Amorium Project forward into the twenty-first century.